

Que Duración para la Doble Agregación Plaquetaria?




SOLACI
SOCIEDAD
LATINOAMERICANA
DE CARDIOLOGIA
INTERVENCIONISTA

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8 / 9 de Octubre 2015

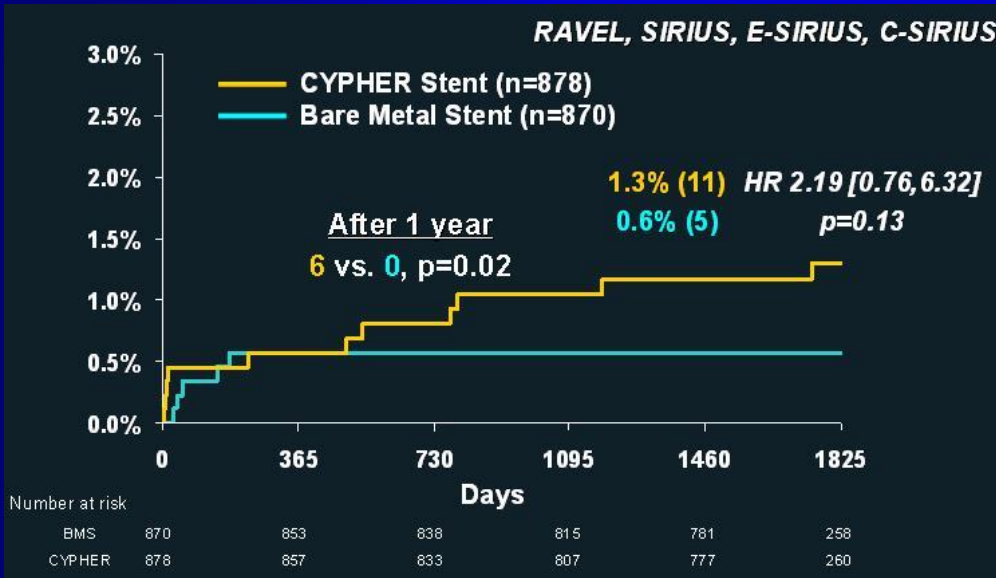
Lima- Perú

Stents Farmacológicos

Trombosis – 5 años

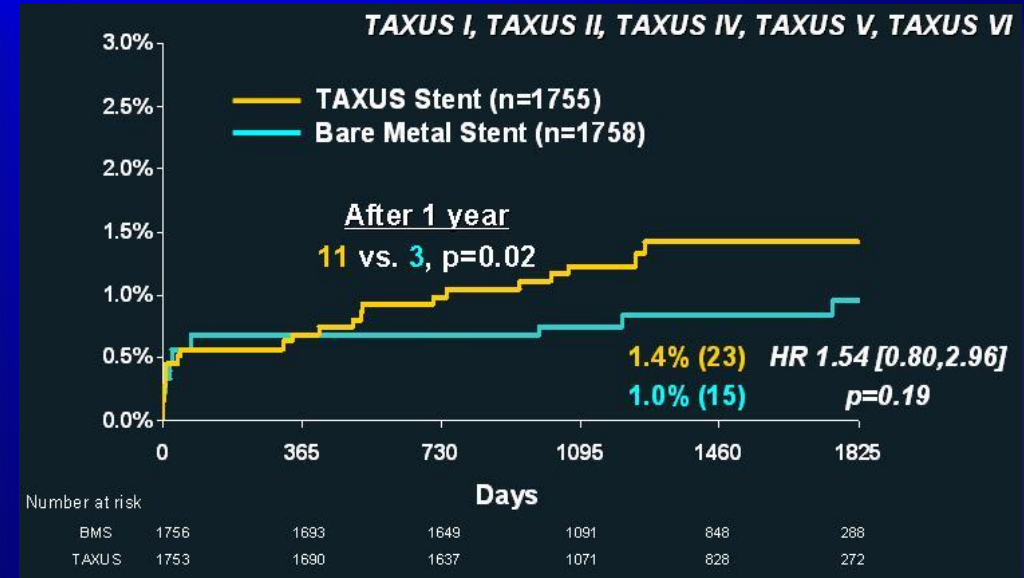
n = 1.748

Ravel, Sirius, C – Sirius, E – Sirius



n = 3.503

Taxus I, II, IV, V, VI



2007 Focused Update of the ACC/AHA/SCAI 2005 Guideline Update for Percutaneous Coronary Intervention

A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines

Table 14. Updates to Section 6.2.1: Oral Antiplatelet Therapy

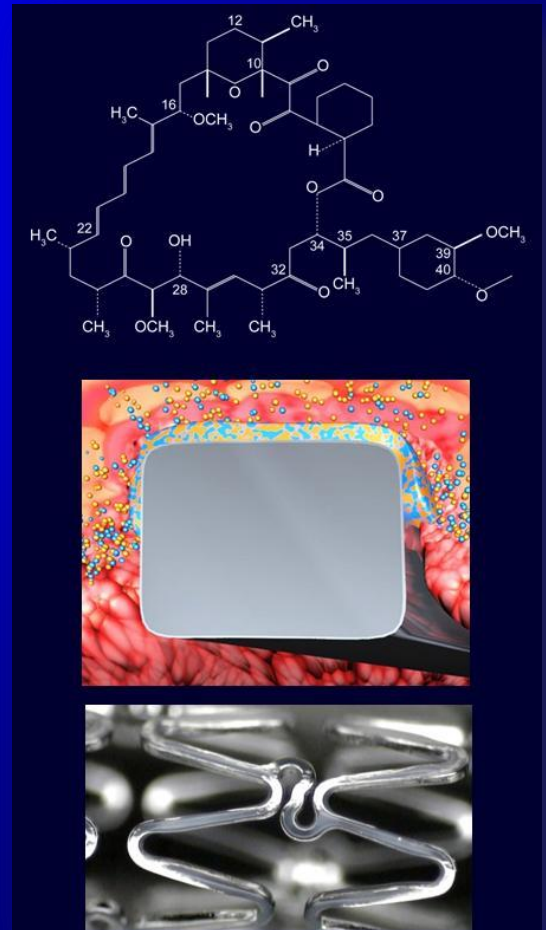
2005 PCI Guideline Update Recommendation	2007 PCI Focused Update Recommendation
<p>In patients who have undergone PCI, clopidogrel 75 mg daily should be given for at least 1 month after bare-metal stent implantation (unless the patient is at increased risk of bleeding; then it should be given for a minimum of 2 weeks), <u>3 months after sirolimus stent implantation, and 6 months after paclitaxel stent implantation, and ideally up to 12 months</u> in patients who are not at high risk of bleeding. (Level of Evidence: B)</p>	<p style="text-align: center;">Class I</p> <p>For all post-PCI stented patients receiving a DES, <u>clopidogrel 75 mg daily should be given for at least 12 months if patients are not at high risk of bleeding.</u> For post-PCI patients receiving a BMS, clopidogrel should be given for a minimum of 1 month and ideally up to 12 months (unless the patient is at increased risk of bleeding; then it should be given for a minimum of 2 weeks). (Level of Evidence: B)</p>



Stents Farmacológicos

Evolución Tecnológica

1st Generation		2nd Generation		3rd Generation		4th Generation	
Cypher® Stent	TAXUS® Express® Stent	TAXUS® Liberté® Stent	Endeavor® Stent	Xience V® and Xience Prime® Stents	ION™ / TAXUS® Element™ Stent	PROMUS Element™ Stent	SYNERGY™ Stent
<i>current benchmark for lowest strut thickness</i>							
0.140 μm (0.0055")	0.132 μm (0.0052")	0.096 μm (0.0038")	0.091 μm (0.0036")	0.081 μm (0.0032")	0.081 μm (0.0032")	0.081 μm (0.0032")	0.074 μm (0.0029")
Stainless Steel		Cobalt Alloys			Platinum Chromium		

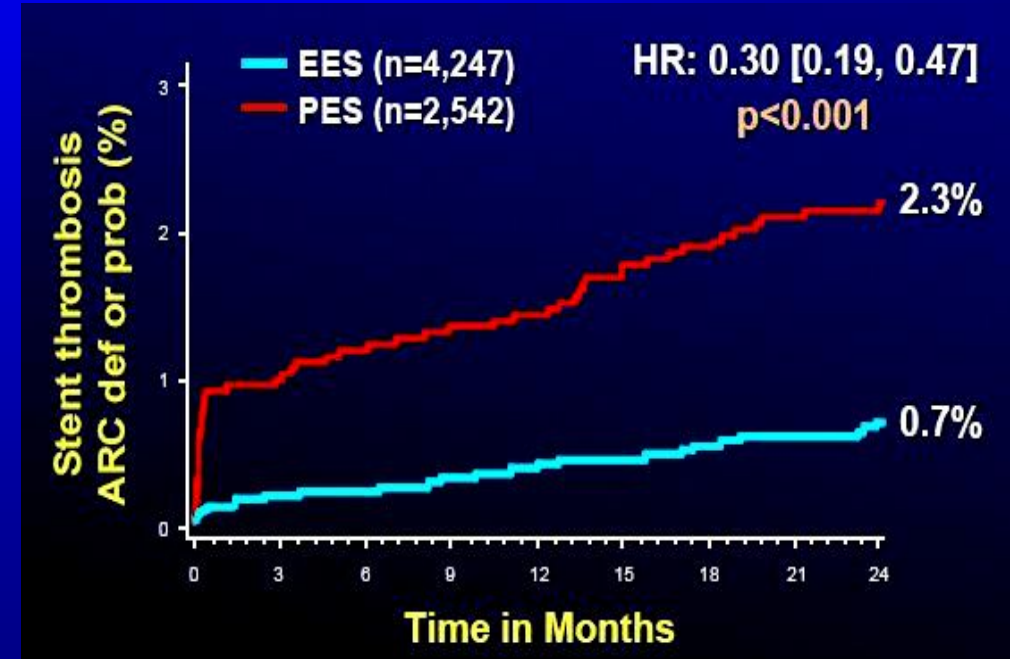
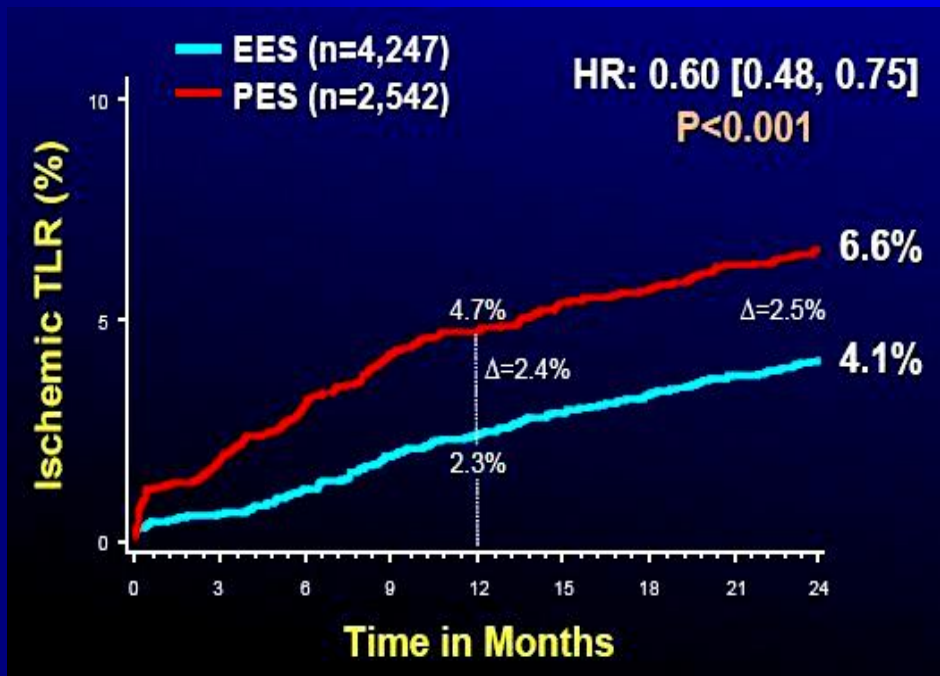


**Polímero de Ácido Poliláctico
Bioabsorbible**

SPIRIT III/III/IV e COMPARE Trials

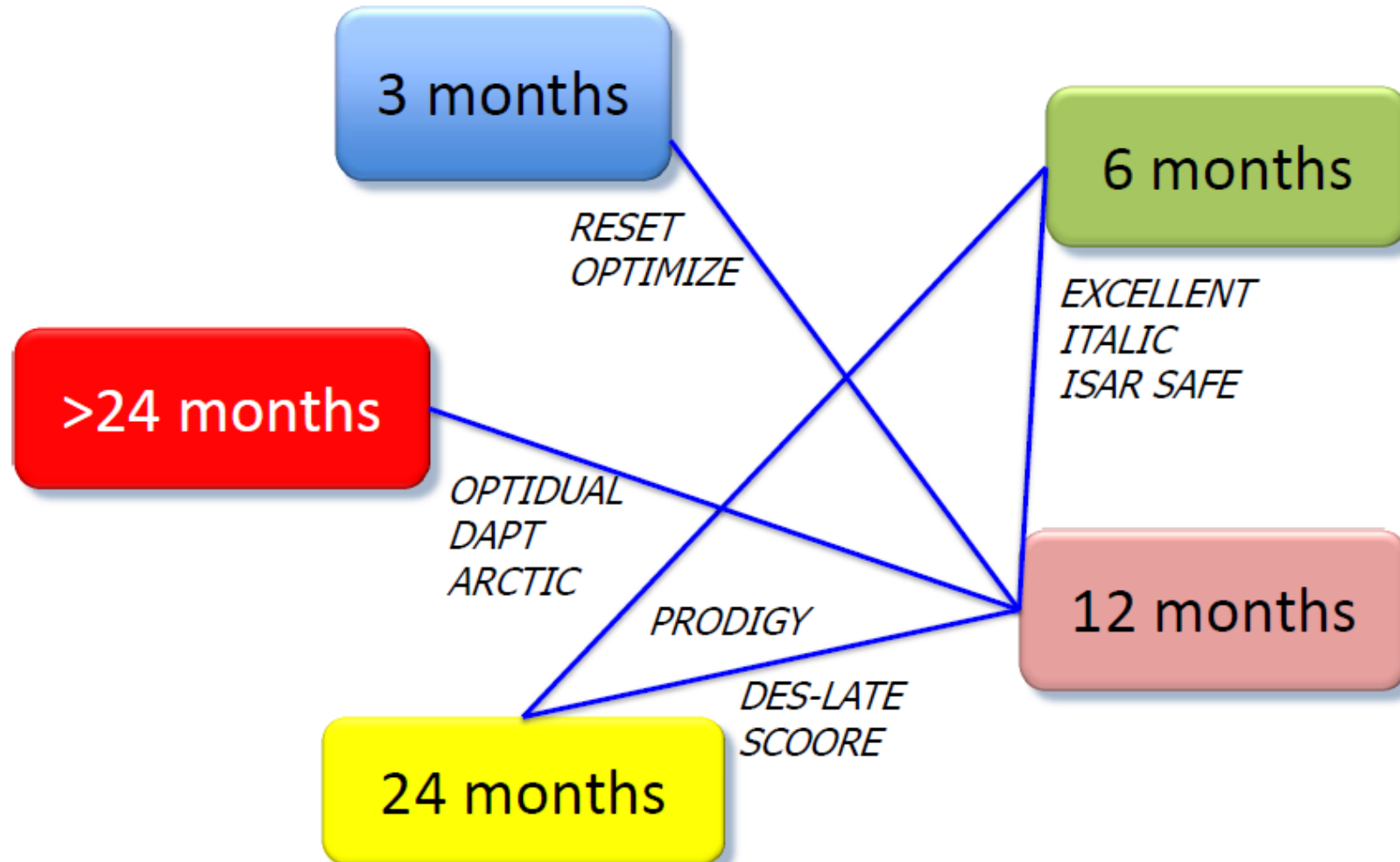
Análise Conjunta de Dados

n = 6.789



Duración de la DAPT

Estudios Randomizados



Doble Agregación Plaquetária

¿Qué camino seguir?



Meta-análisis DES

Estudios Randomizados 3 o 6 m vs 12 m

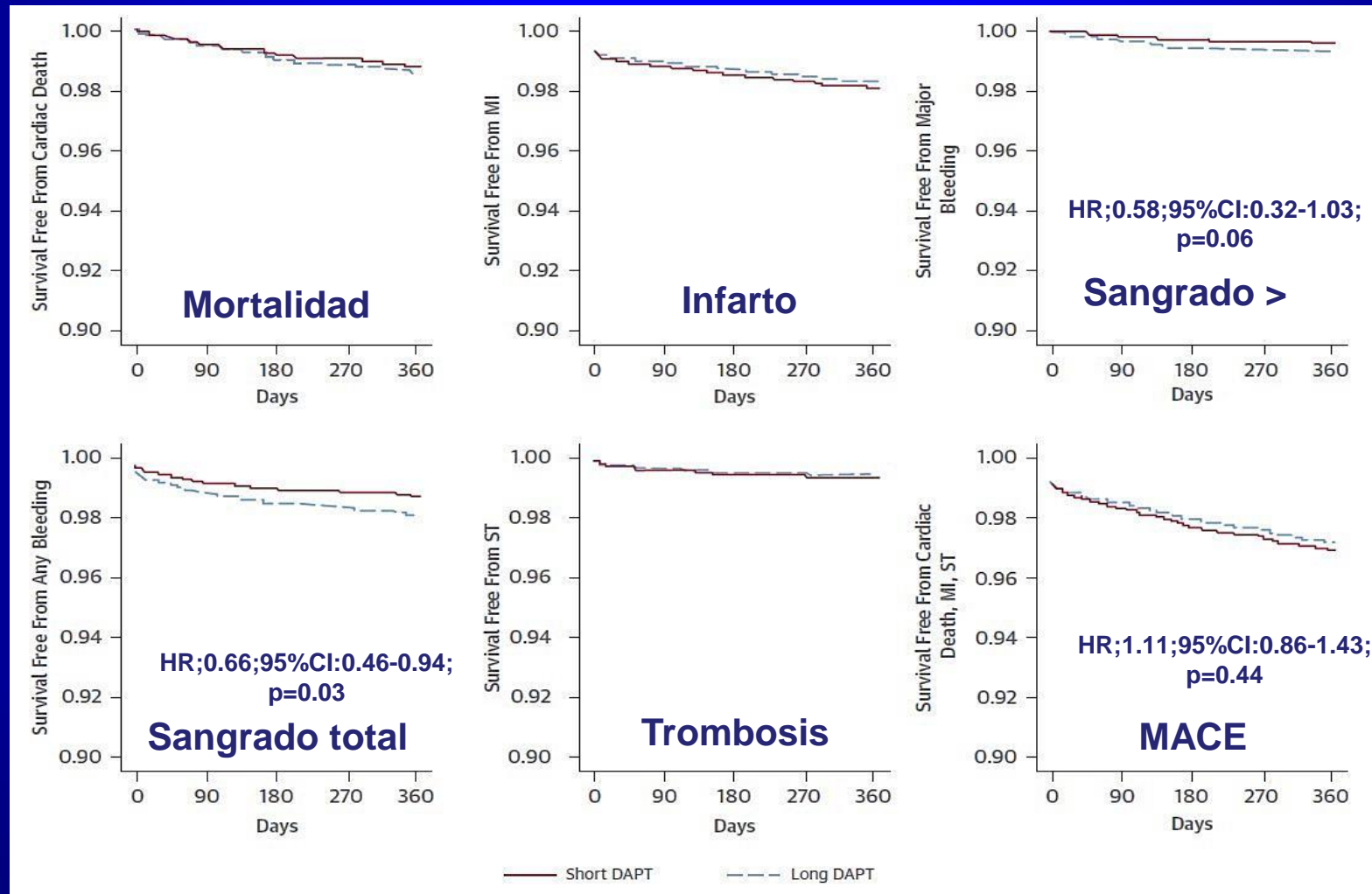
n = 8.180

TABLE 1 Main Characteristics of Randomized Trials Included in Meta-Analysis

Study (Ref. #)	n	Primary Endpoint	Design	Follow-Up	DAPT Duration (Months)	Primary Endpoint Results
EXCELLENT (13)	6 months (n = 722) 12 months (n = 721)	Cardiac death/MI/ ischemia-driven TVR	Noninferiority	1 yr	6 vs. 12	Noninferiority demonstrated
OPTIMIZE (12)	3 months (n = 1,563) 12 months (n = 1,556)	Death/MI/CVA/major bleeding	Noninferiority	1 yr	3 vs. 12	Noninferiority demonstrated
PRODIGY (16)	6 months (n = 751) 12 months (n = 750)	Death/MI/CVA	Superiority	2 yrs	6 vs. 24	Superiority of 24-month DAPT not demonstrated
RESET (14)	3 months (n = 1,059) 12 months (n = 1,058)	Cardiac death/MI/ST/TVR/ major bleeding	Noninferiority	1 yr	3 vs. 12	Noninferiority demonstrated

Meta-análisis DES

Estudios Randomizados 3 o 6 m vs 12 m



DAPT STUDY

12 vs 30 meses

11 Países 452 Centros n = 9.961

12 meses pós ICP SF c/ DAPT non presentaran MACCE, Nueva Revascularización, Sangrado Moderado o Severo

n = 4.941

Placebo + AAS 18 m

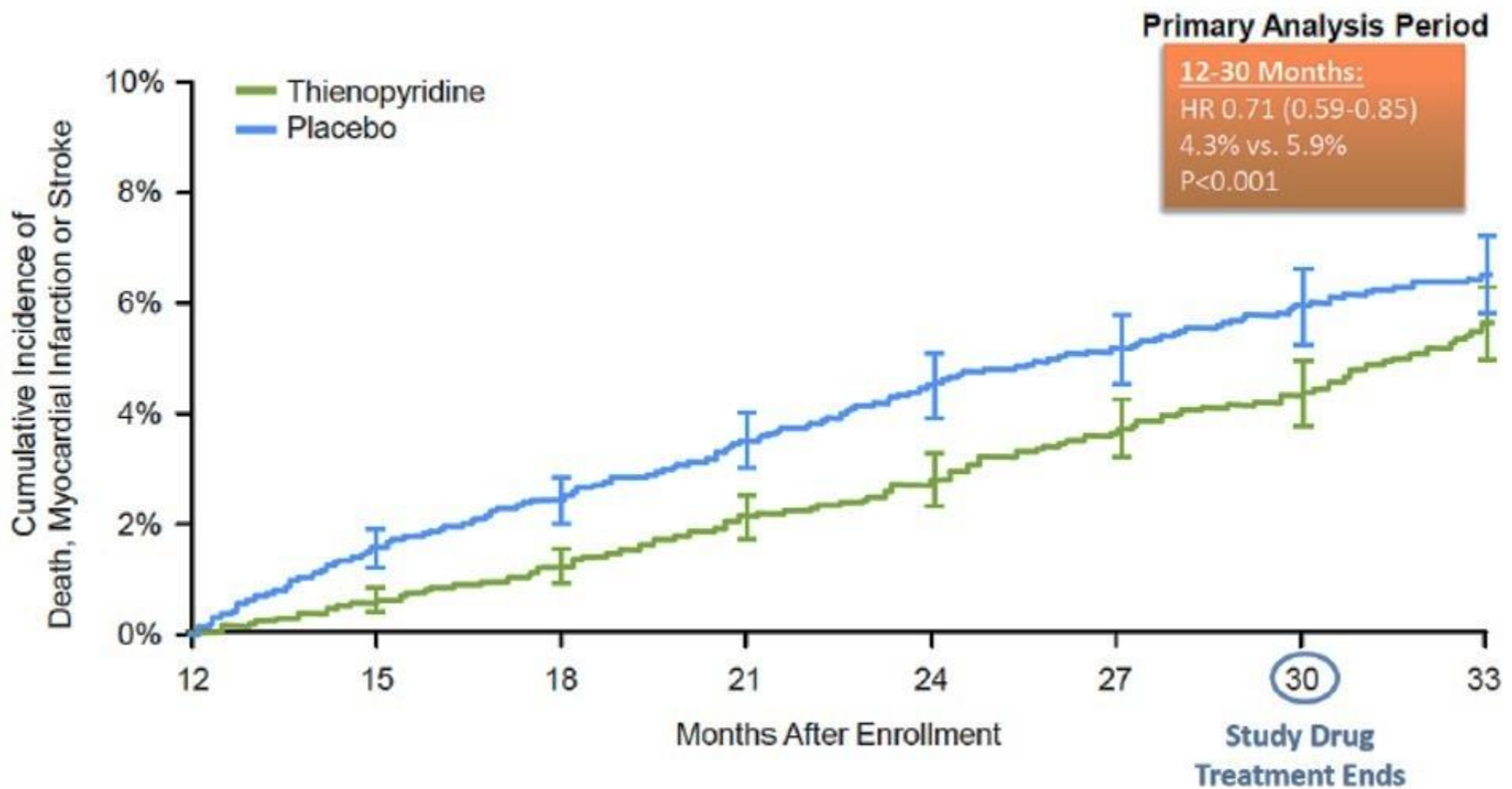
n = 5.020

DAPT 18 m

Desfecho Eficacia – Trombosis Definitiva/Probable e MACCE
Desfecho de Seguridad – Sangrado Moderado/Severo (GUSTO)

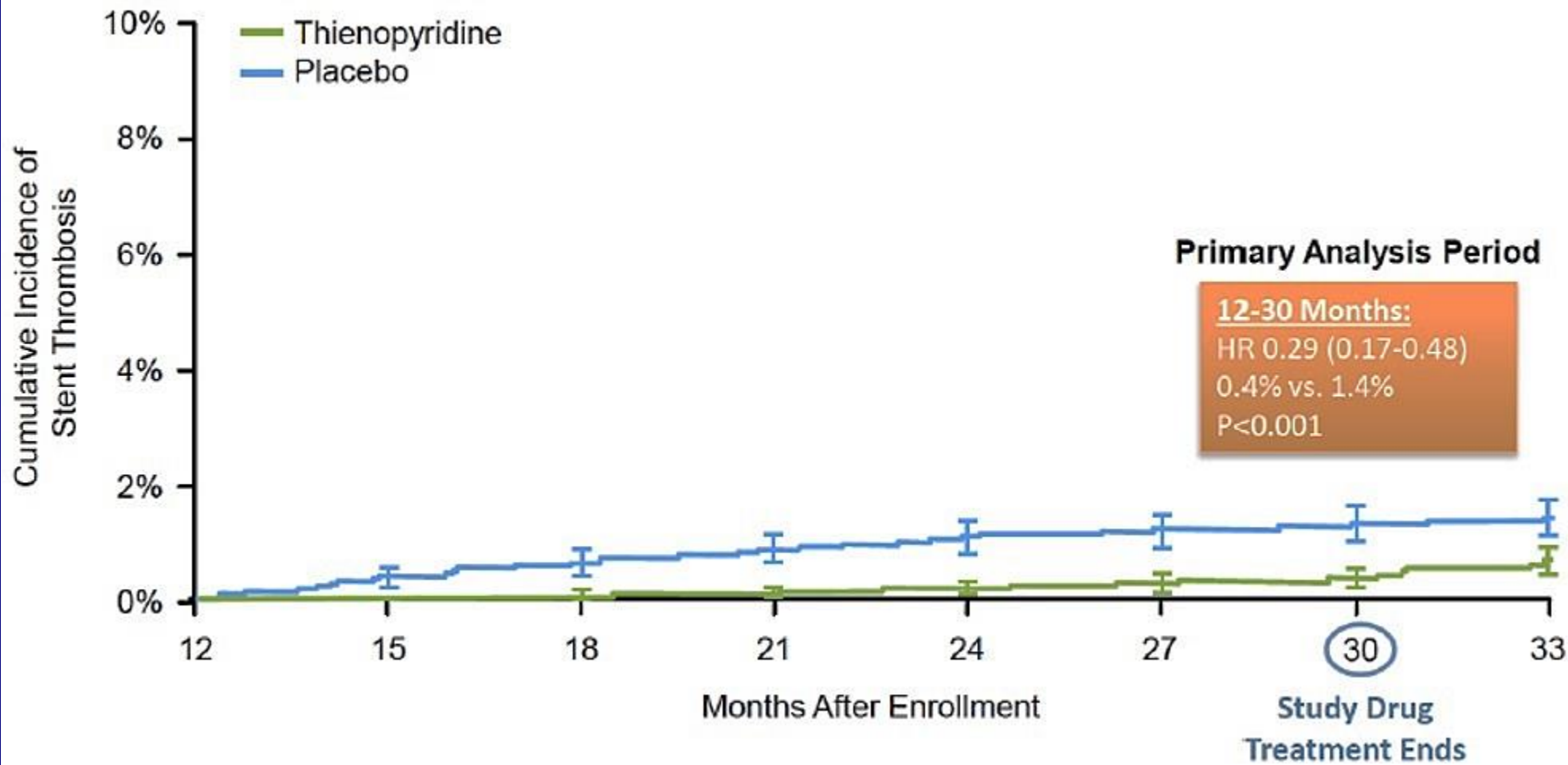
DAPT STUDY

Co-Primary Endpoint - MACCE



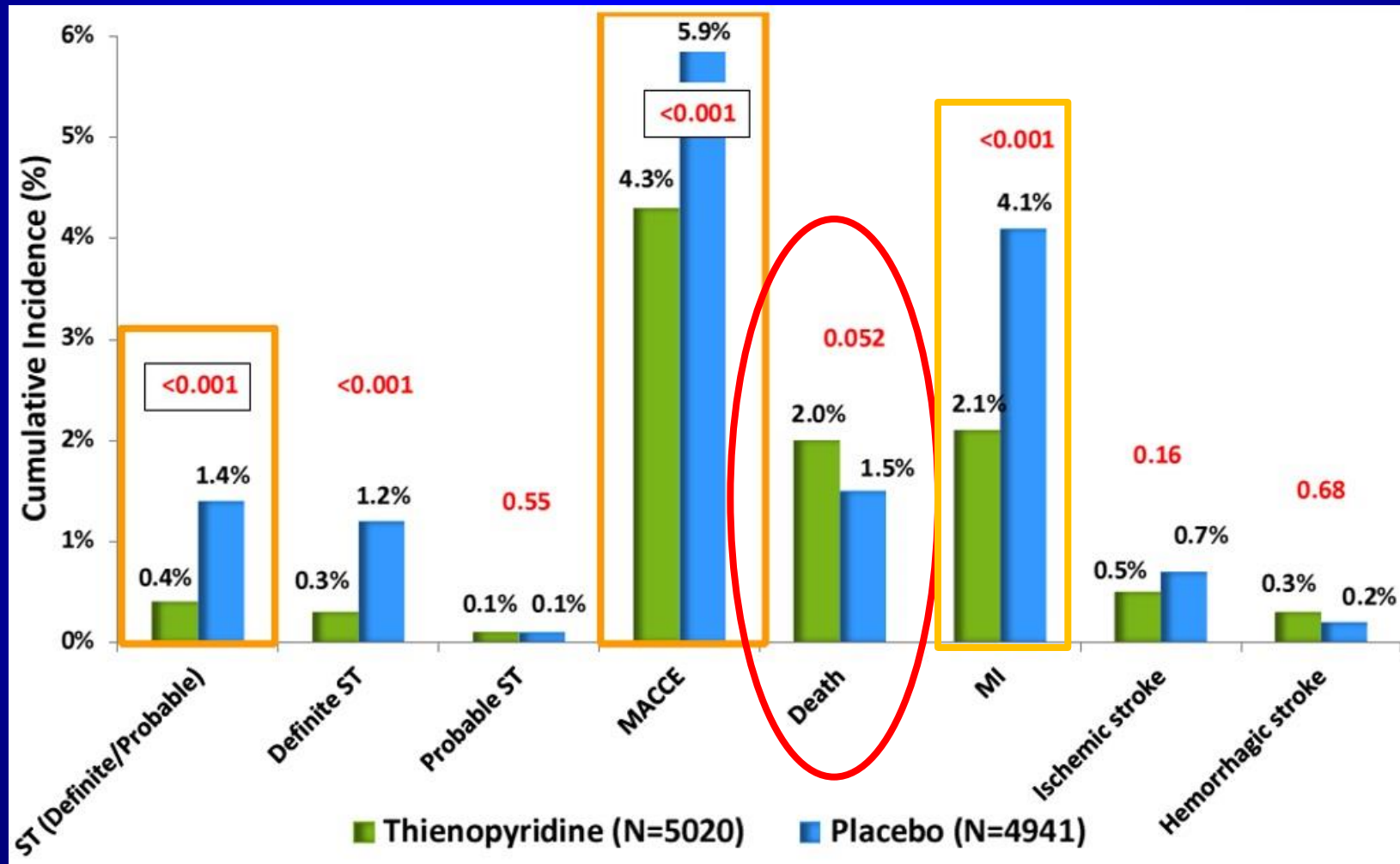
DAPT STUDY

Co-Primary Endpoint



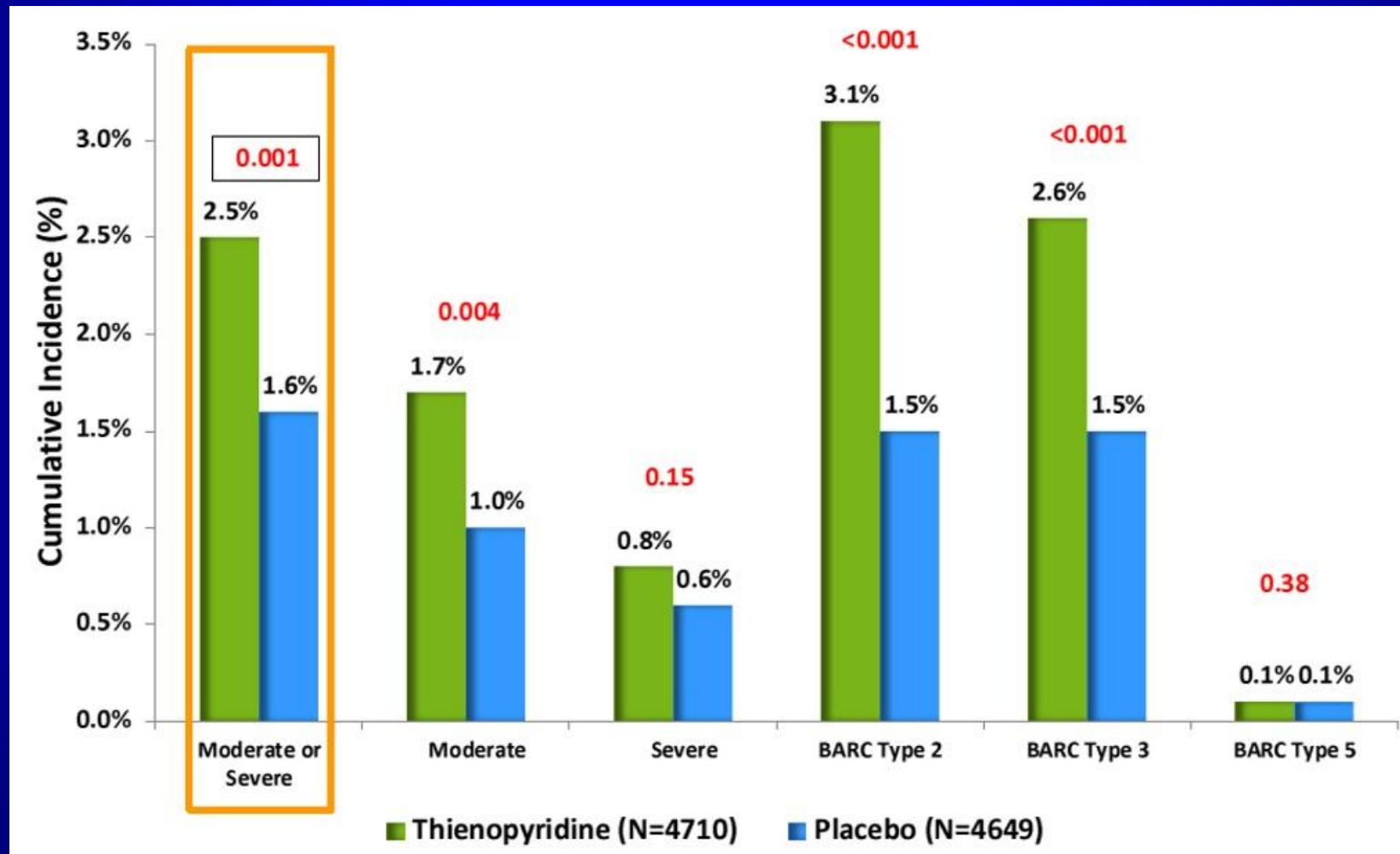
DAPT STUDY

Componentes del Endpoint



DAPT STUDY

Endpoint de Seguridad



DAPT STUDY

Endpoint de Seguridad

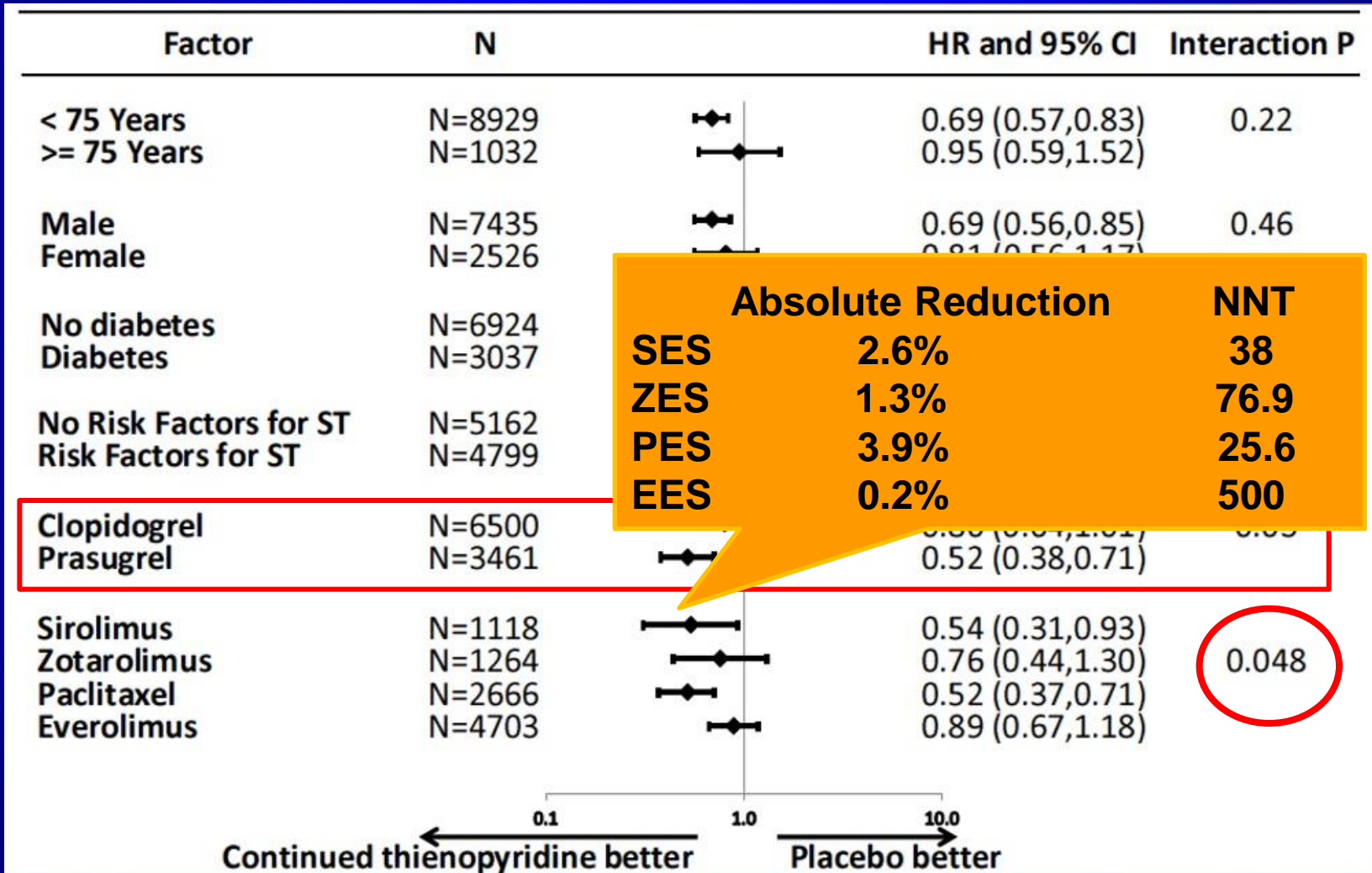
12-30 Months				
	Thienopyridine N=5020	Placebo N=4941	P-Value	Absolute Difference
All-Cause Mortality	98 (2.0%)	74 (1.5%)	0.052	24 (0.5%)
Cardiac	45 (0.9%)	47 (1.0%)	0.98	-2 (-0.1%)
Vascular	5 (0.1%)	5 (0.1%)	0.98	0 (-)
Non-Cardiovascular	48 (1.0%)	22 (0.5%)	0.002	26 (0.5%)

Non-Cardiovascular Deaths, 12-33 Months

	Thienopyridine N=5020	Placebo N=4941	P-value
Relatedness for Deaths*			
Bleeding-Related Death	11 (0.22%)	3 (0.06%)	0.057
Trauma-Related Death	9 (0.18%)	2 (0.04%)	0.07
Cancer-Related Death	31 (0.62%)	14 (0.28%)	0.02

DAPT STUDY

MACCE - Subgrupos



DAPT TRIAL

Conclusiones

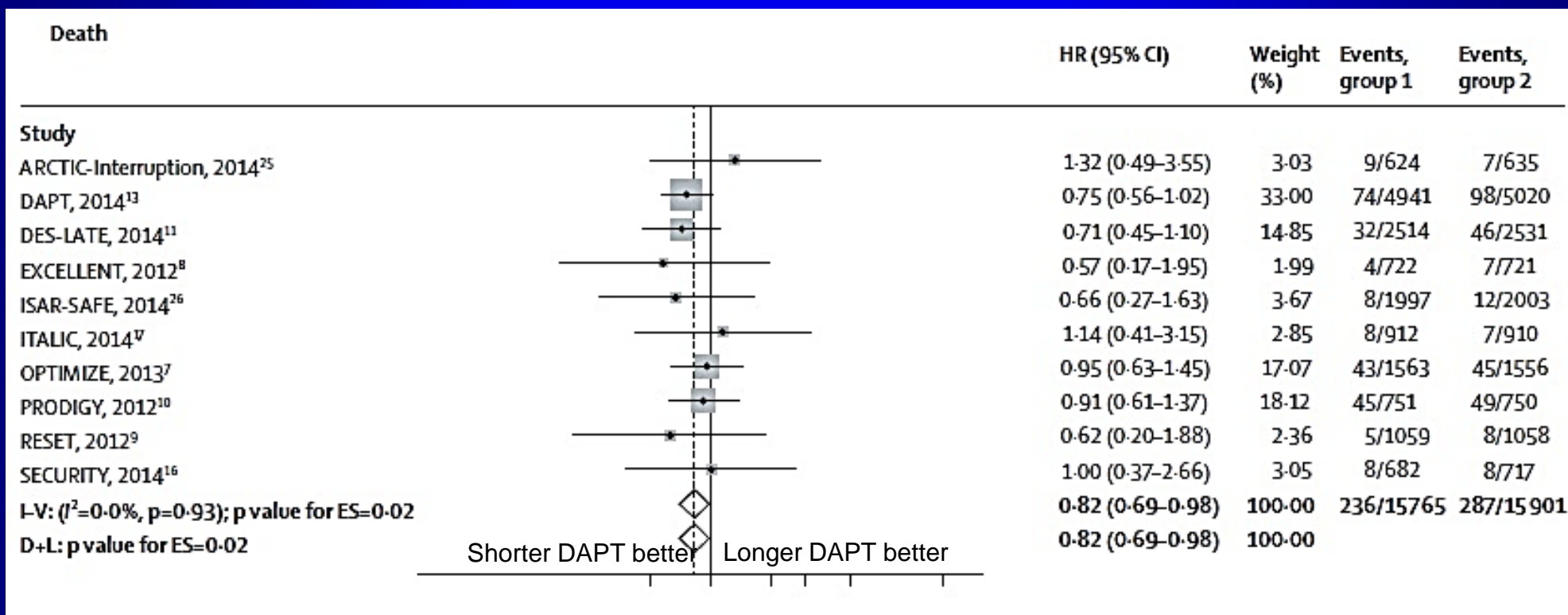
La duración de la DAPT por más de 12 meses proporciono:

- Una reducción en la tasa de MACE y trombosis de los stents a costas de una elevación significativa de 61% en los sangrados moderados/graves.**
- Ocurrió una fuerte tendencia a una mayor mortalidad (non-cardíaca). Una substancial parte de este aumento debido a los sangrados.**
- Una significativa interacción entre los tipos de stents y la tasa de MACCE sugiere que estas observaciones pueden non ser validas para los stents de segunda generación.**

Estudios DAPT

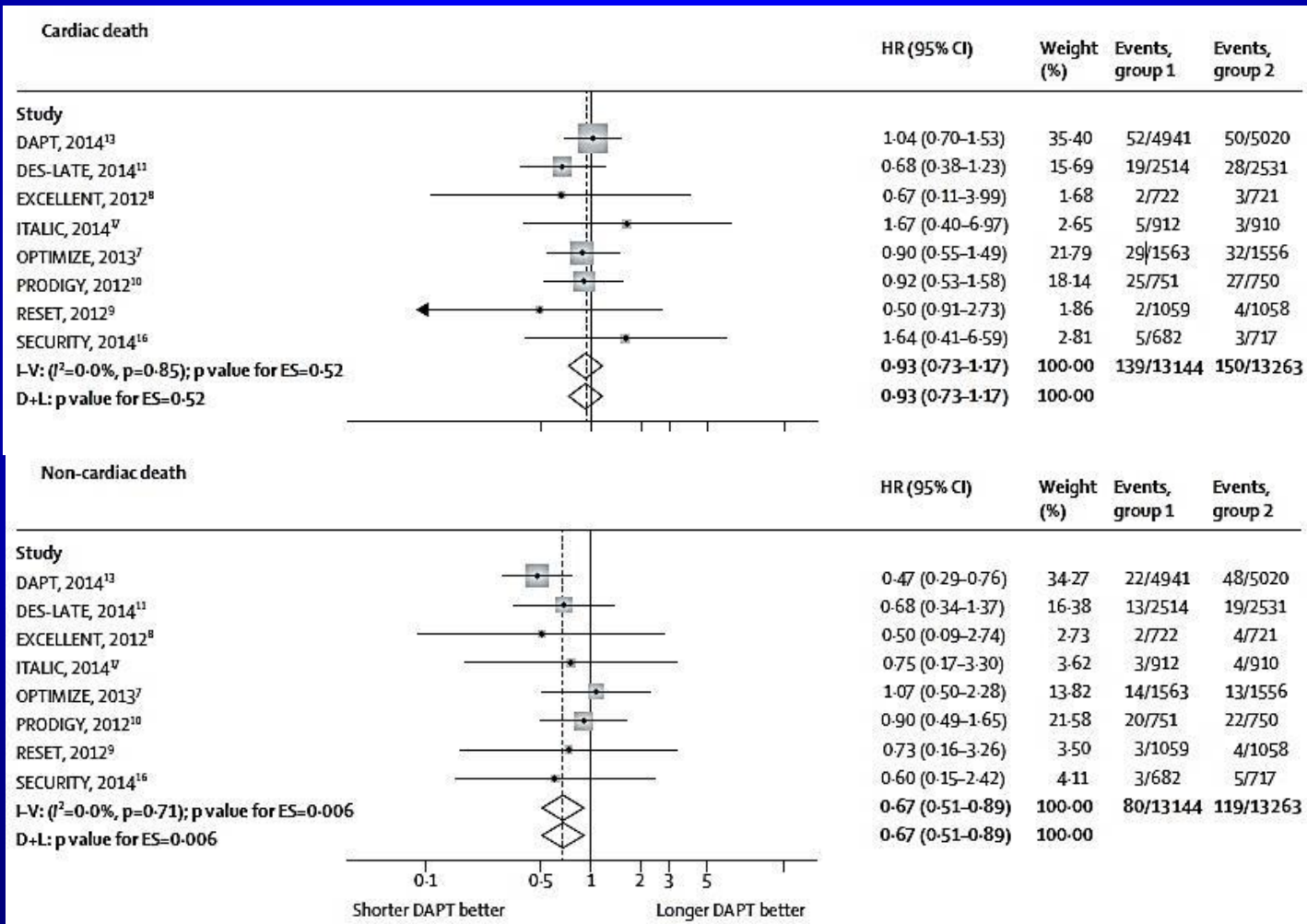
Meta-análisis - Mortalidad

10 Estudios ICP con SF n = 31.666



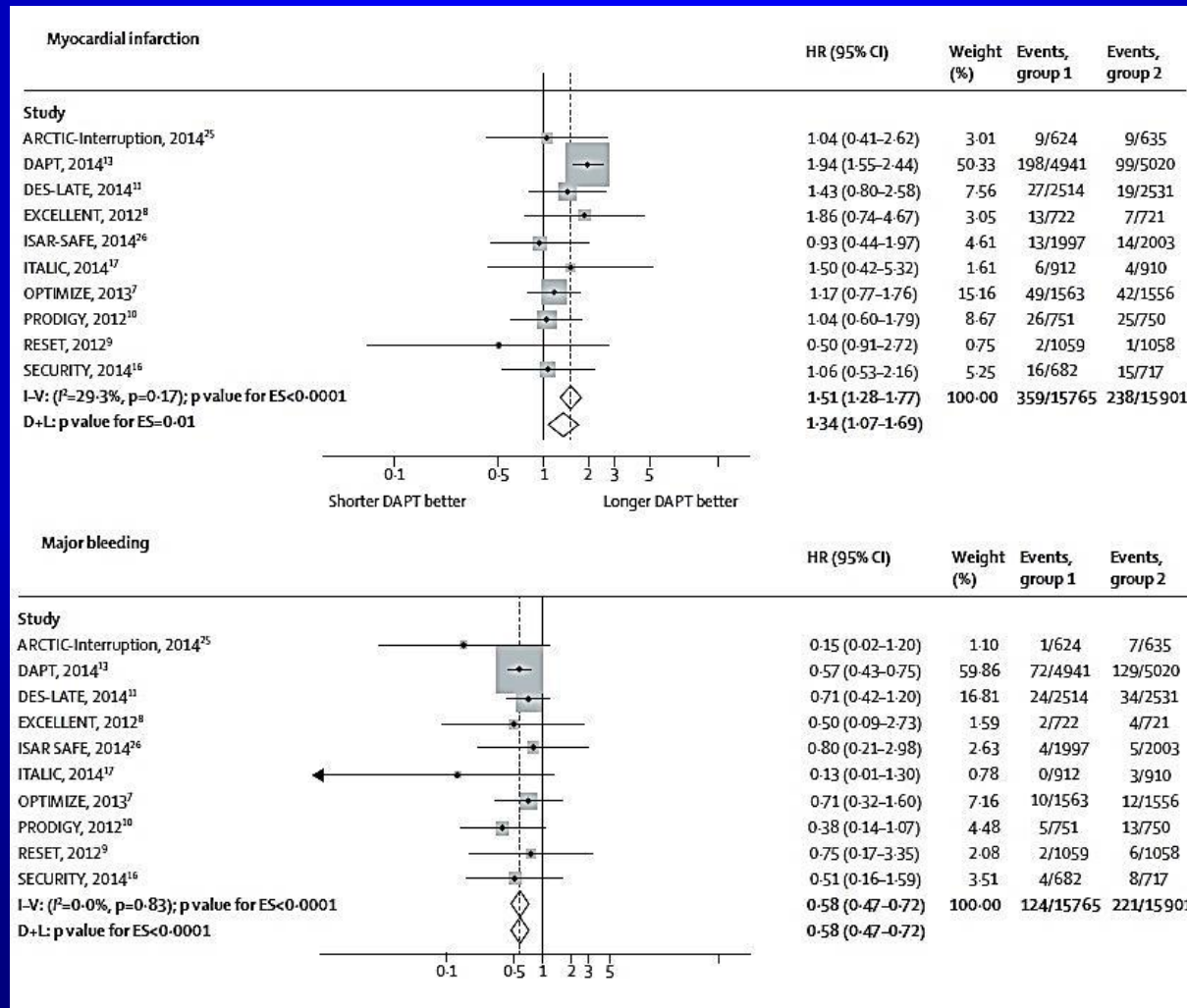
Estudios DAPT

Meta-análisis - Mortalidad



Estudios DAPT

Meta-análisis – IAM Y Sangrado



Optimal duration of dual antiplatelet therapy after percutaneous coronary intervention with drug eluting stents: meta-analysis of randomised controlled trials

[Eliano Pio Navarese](#), associate professor of medicine and interventional cardiologist,^{1,2} [Felicita Andreotti](#), associate professor of medicine and cardiologist,^{2,3} [Volker Schulze](#), interventional cardiologist,^{1,2} [Michalina Kołodziejczak](#), research fellow,^{1,2,4} [Antonino Buffon](#), associate professor of medicine and interventional cardiologist,^{3,2} [Marc Brouwer](#), director of research and cardiologist,^{5,2} [Francesco Costa](#), research fellow,⁶ [Mariusz Kowalewski](#), research fellow,^{2,7} [Gianfranco Parati](#), professor of medicine and cardiologist,⁸ [Gregory Y H Lip](#), professor of medicine and cardiologist,^{9,2} [Malte Kelm](#), professor of medicine and director of department,^{1,2} and [Marco Valgimigli](#), associate professor of medicine and interventional cardiologist⁶

10 Estudios Randomizados n = 32.287

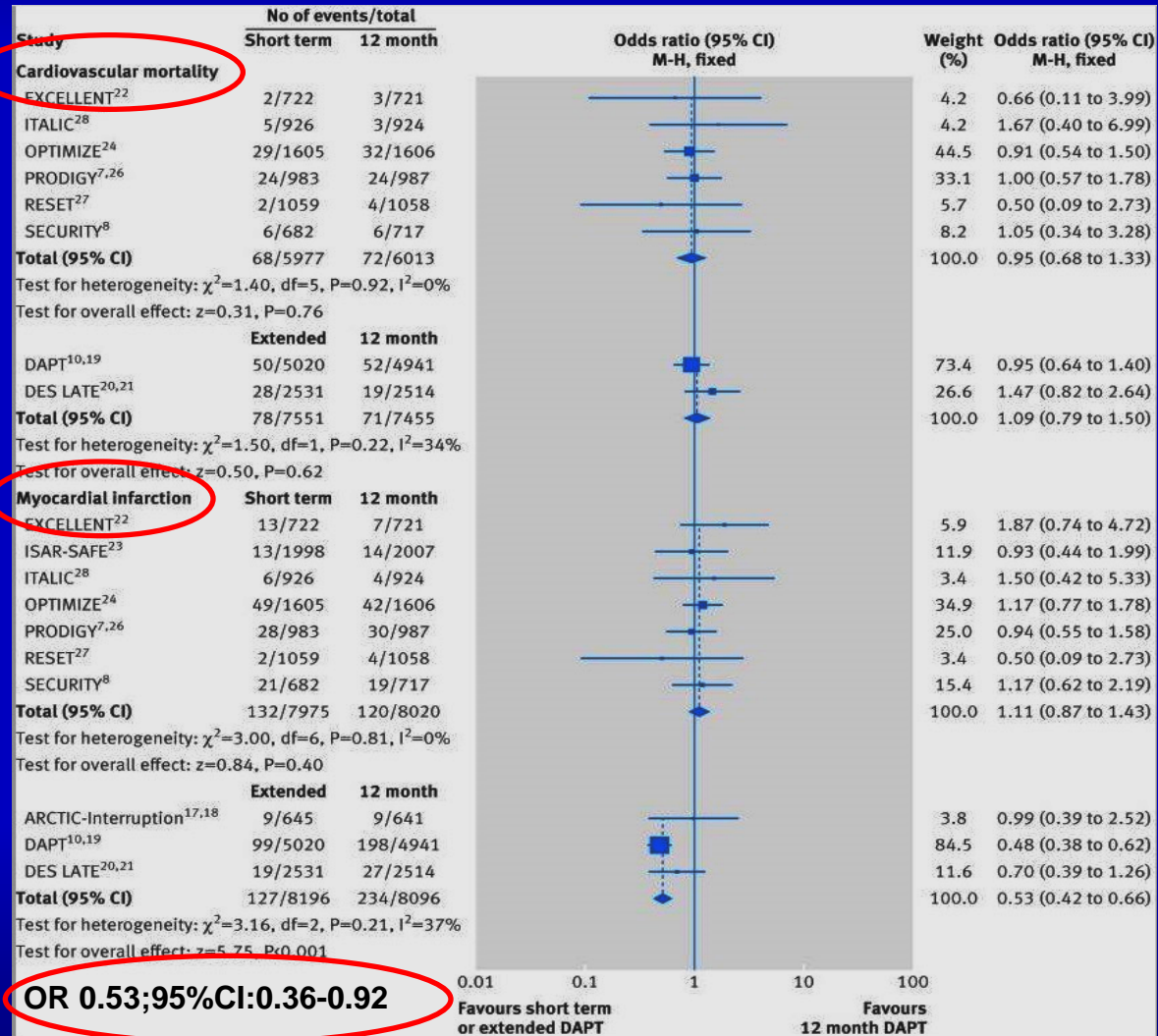
2 Comparaciones

I – Short Term < 12m vs 12 m

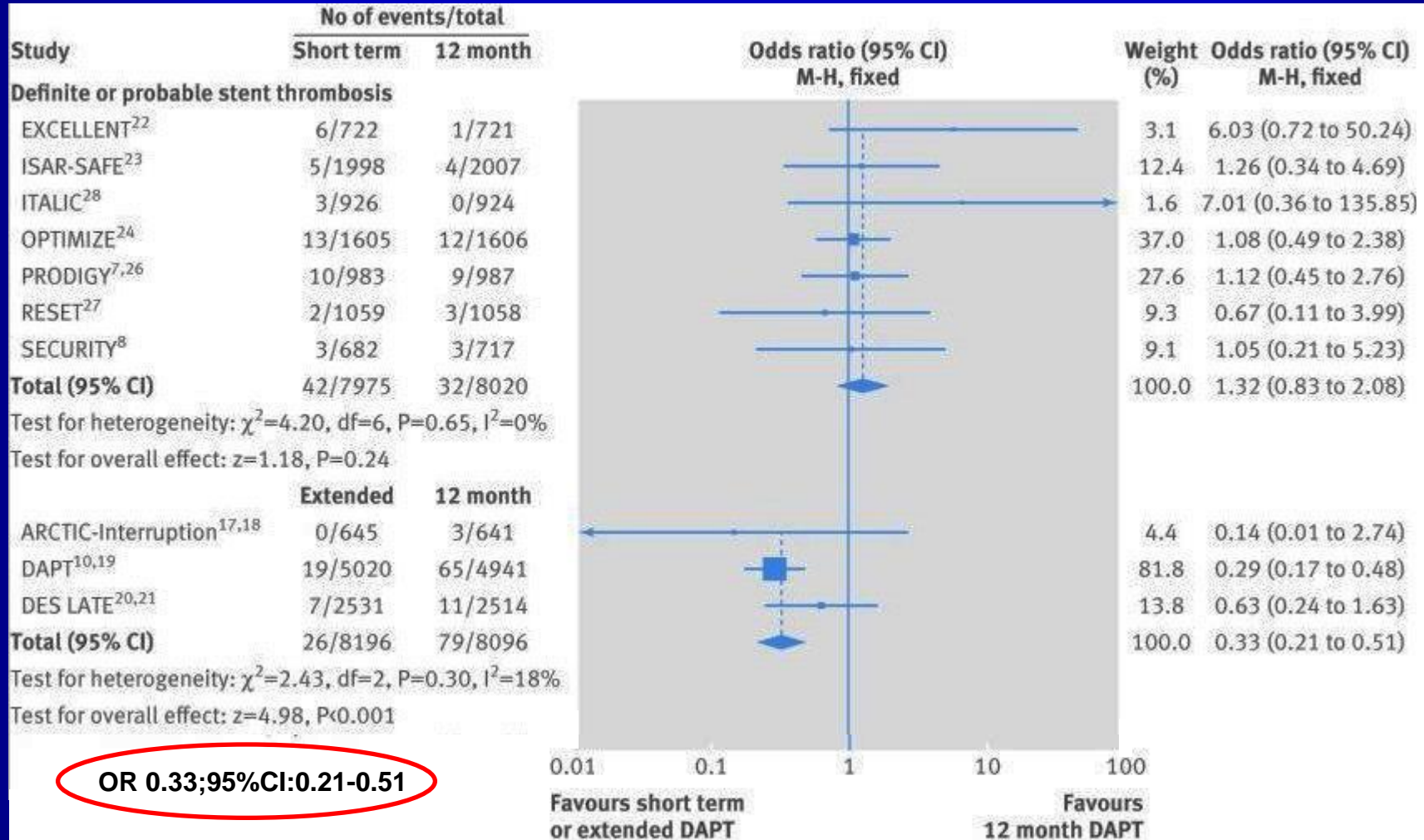
II – Extend > 12 m vs 12 m

Comparación Short o Extend vs 12 m

Mortalidad CV y IM

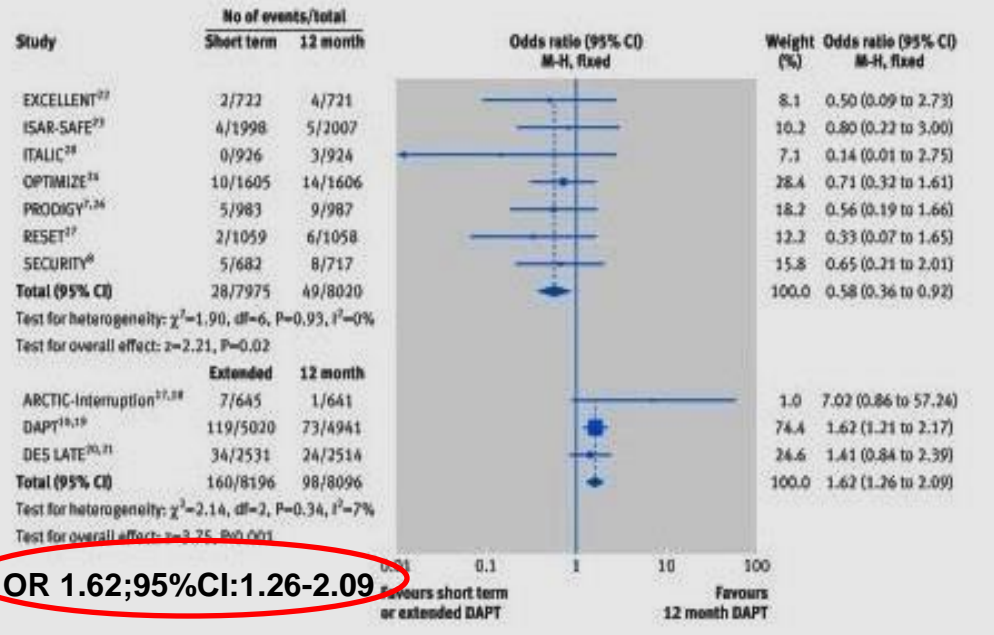


Comparación Short o Extend vs 12 m Stents Trombosis

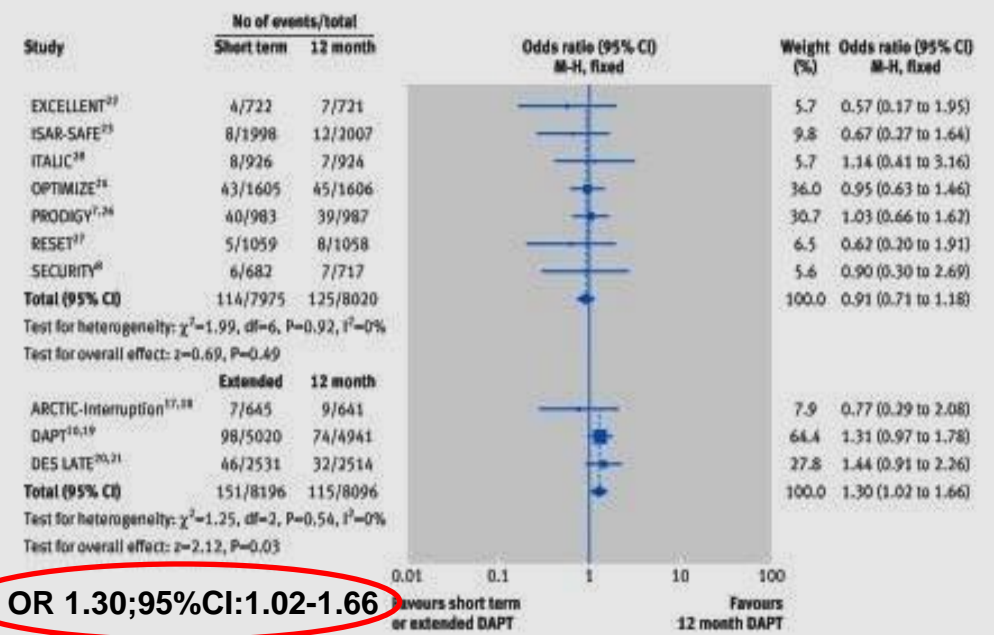


Comparación Short o Extend vs 12 m

Sangrado y Mortalidad Total



Sangrado

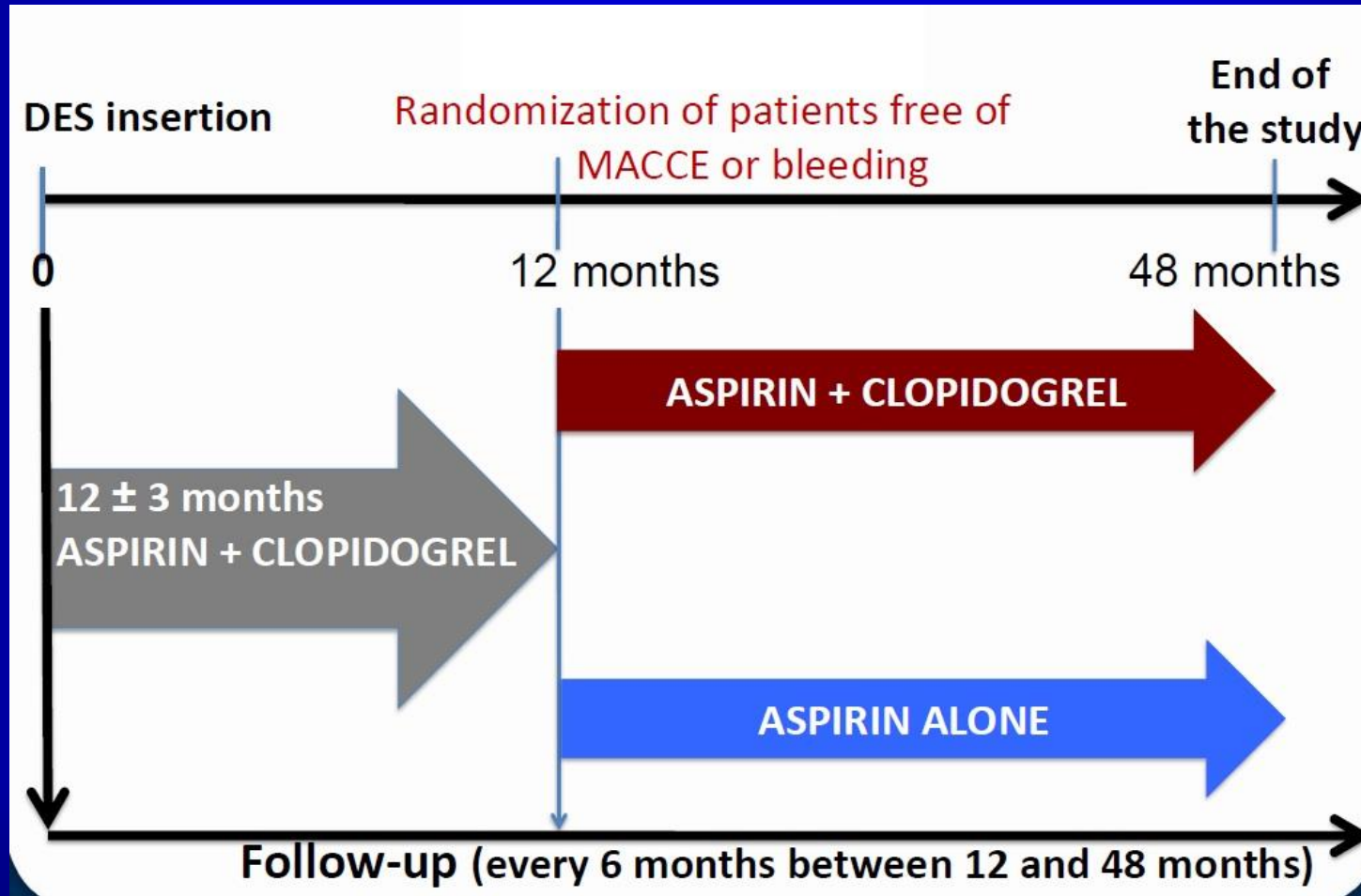


Mortalidad

OPTIDUAL TRIAL

Diseño de lo Estudio

n = 1.398 58 Centros Francia Enero/2009 a Enero/2013



OPTIDUAL TRIAL

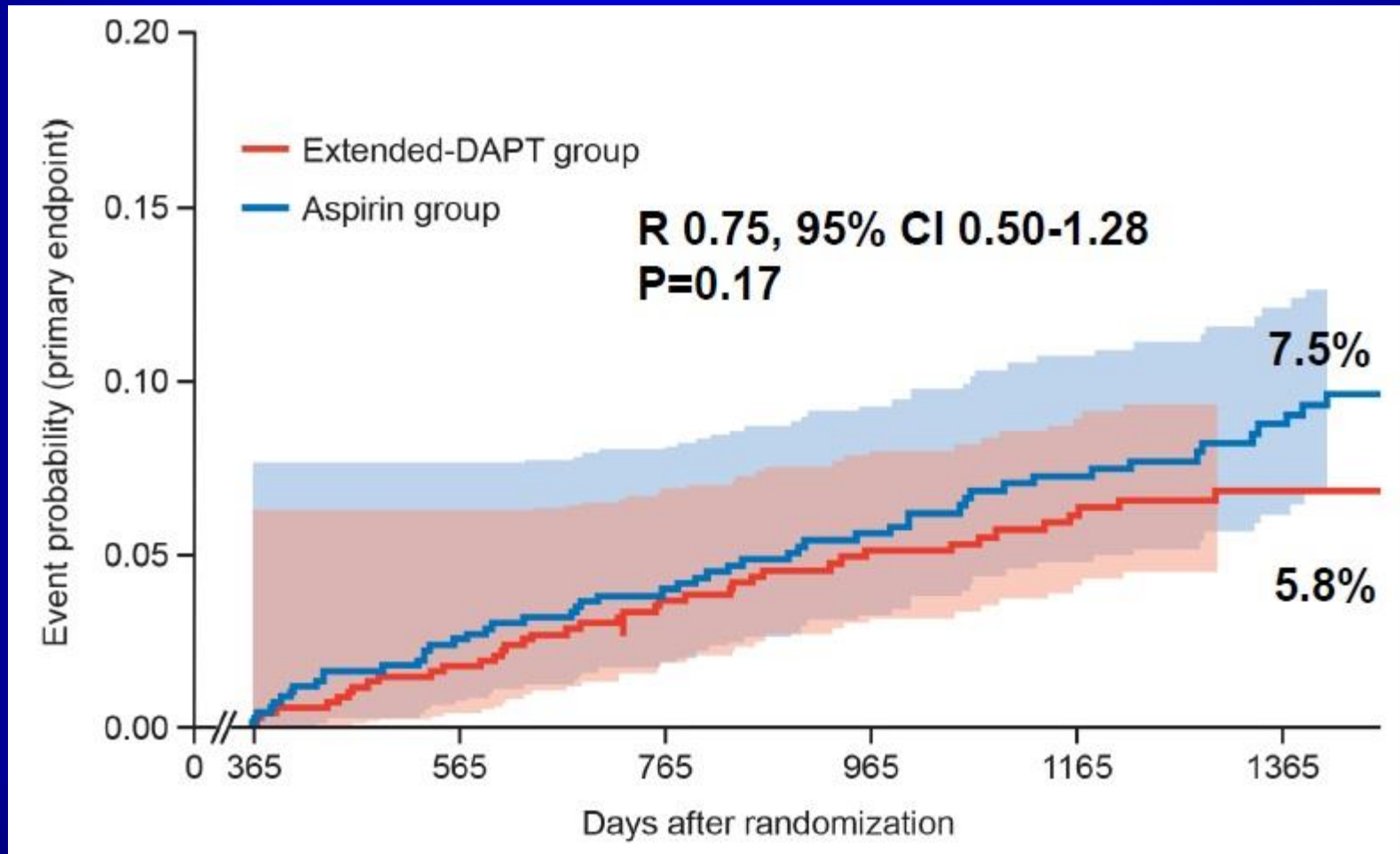
Características Básicas

	EXTENDED DAPT GROUP n=695	ASPIRIN GROUP n=690	P value
Indication for PCI			
STEMI	10.7%	11.9%	0.47
Non-STEMI	14.2%	17.0%	0.39
Unstable angina	9.5%	9.1%	0.81
Stable angina	34.5%	30.0%	0.07
Silent ischaemia	19.9%	21.9%	0.35
Other	11.2%	10.1%	0.63
Type of DES			
Sirolimus	19.9%	17.5%	0.17
Paclitaxel	15.2%	16.0%	0.65
Zotarolimus	8.3%	10.8%	0.05
Everolimus	50.2%	49.2%	0.66
Other	6.4%	6.5%	0.93
Target vessel			
Left main	<1%	>1%	0.69
LAD	58%	64%	0.007
LCX	33%	31%	0.59
RCA	41%	39%	0.58

OPTIDUAL TRIAL

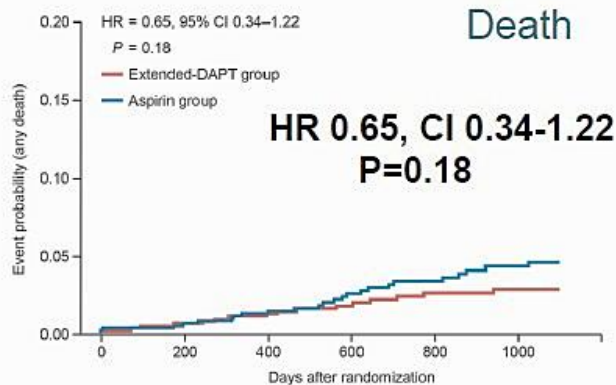
Endpoint Primario

Muerte, IAM, ACV y Sangrado >



OPTIDUAL TRIAL

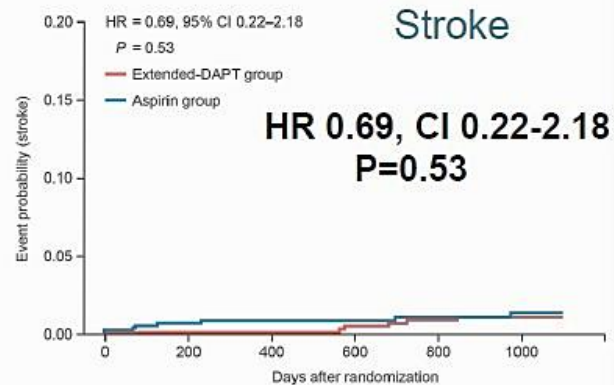
Componentes del Endpoint



Numbers at risk:

Extended-DAPT group
Aspirin group

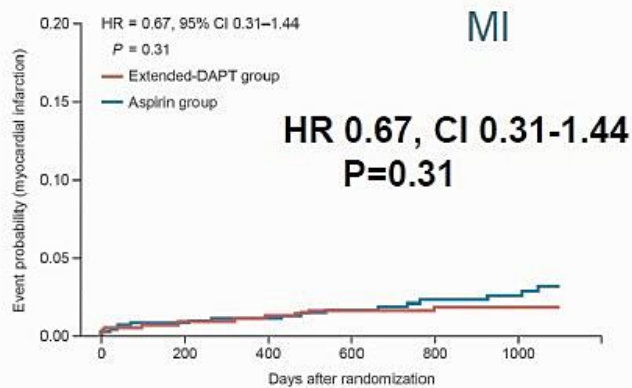
695	651	585	510	456	360
690	638	573	494	430	343



Numbers at risk:

Extended-DAPT group
Aspirin group

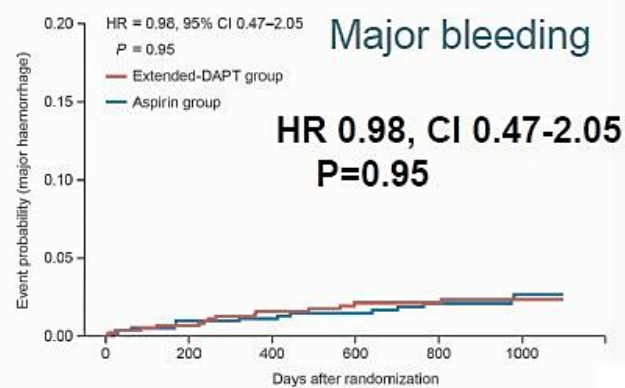
695	652	585	509	455	358
690	635	569	494	428	339



Numbers at risk:

Extended-DAPT group
Aspirin group

695	652	585	509	455	358
690	635	569	494	428	339



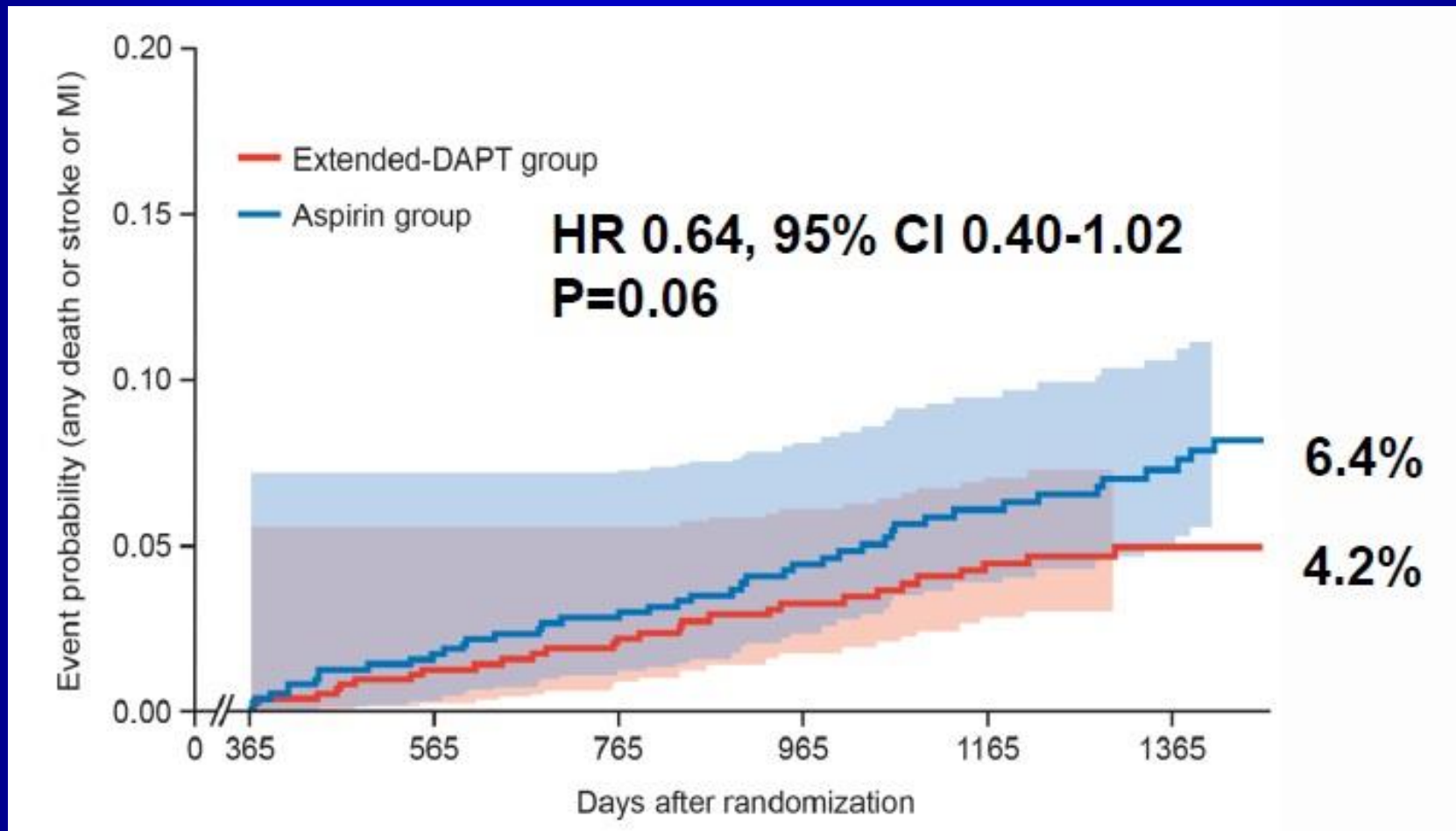
Numbers at risk:

Extended-DAPT group
Aspirin group

695	648	576	501	449	354
690	632	566	491	426	338

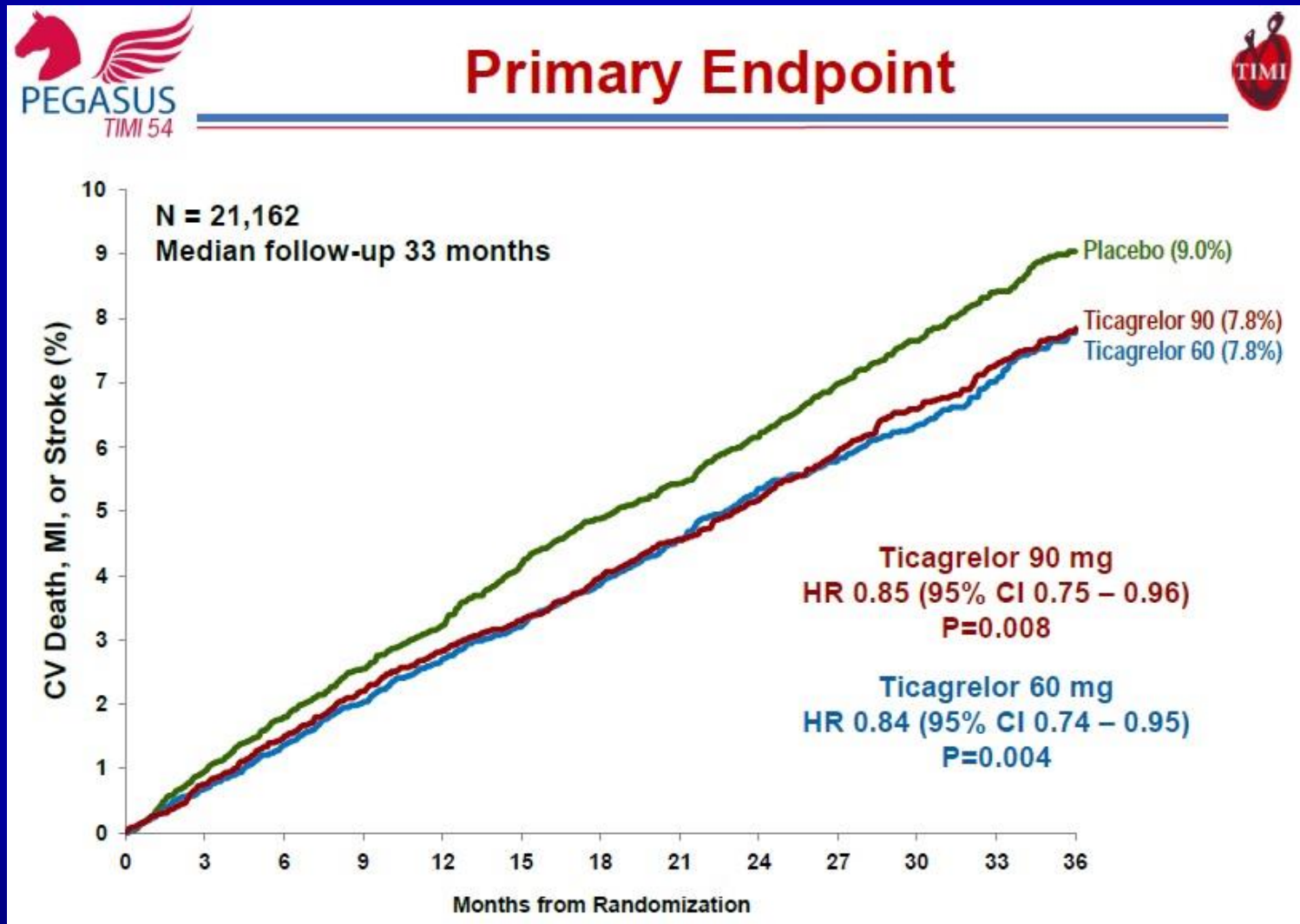
OPTIDUAL TRIAL

Eventos Isquémicos: Muerte, ACV o IAM

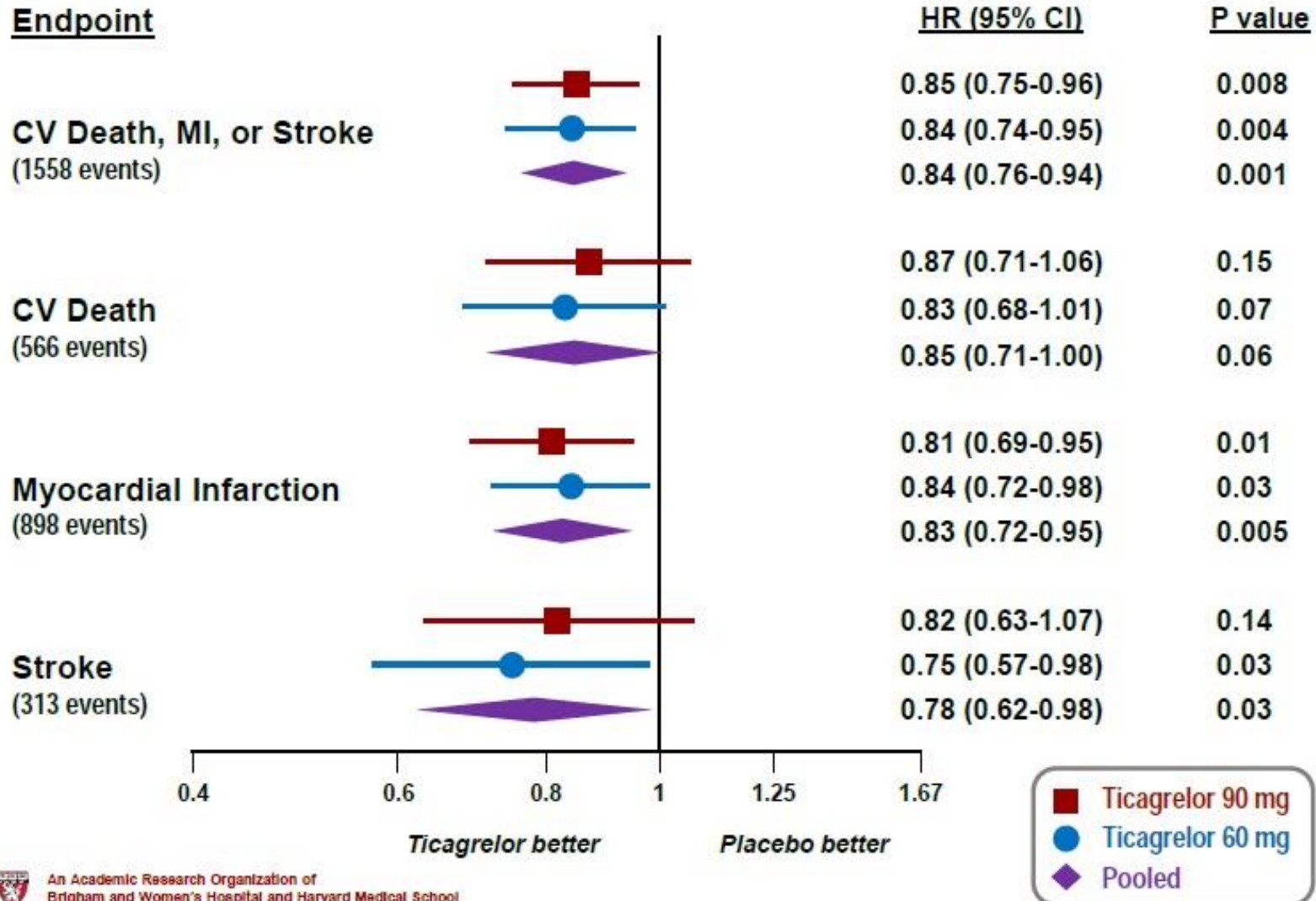


PEGASUS TRIAL – TIMI 54

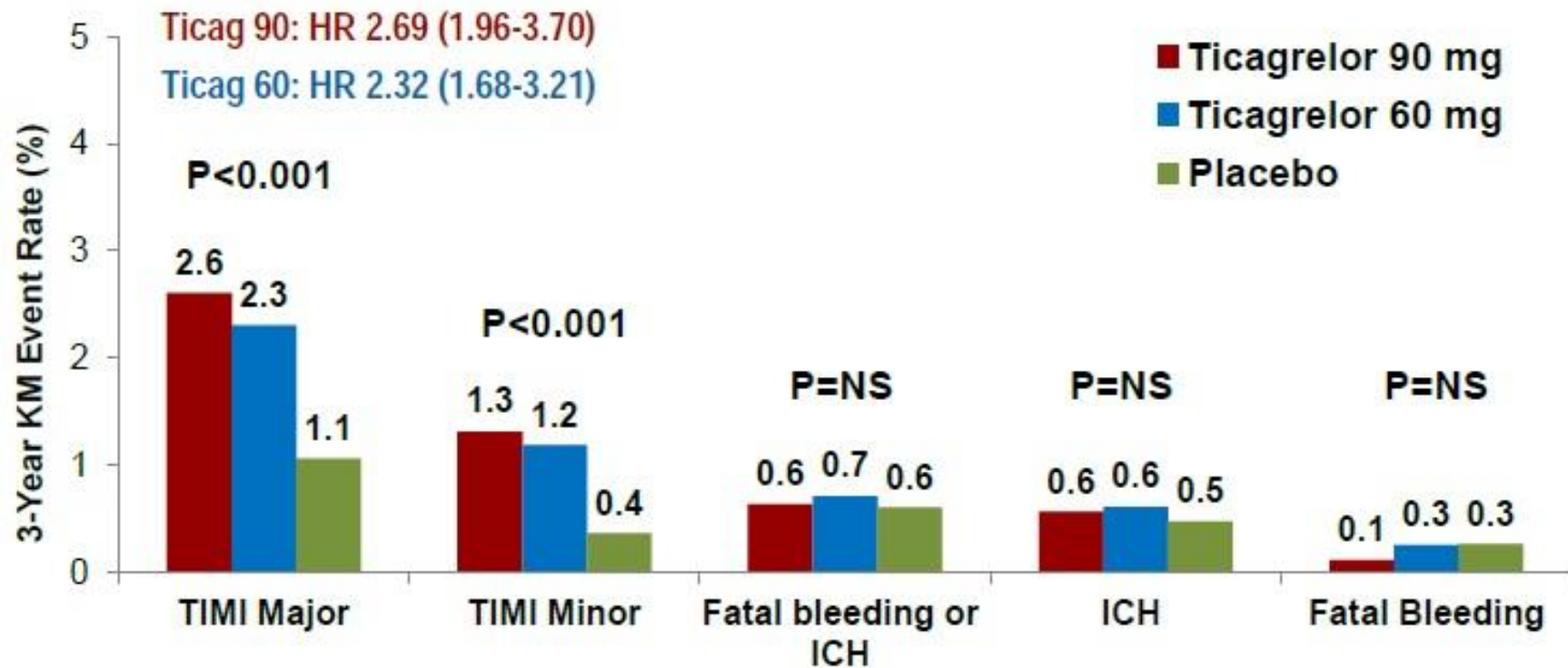
Eventos Isquémicos: Muerte, IAM o ACV



Components of Primary Endpoint



Bleeding



Other Efficacy Outcomes

Outcome	Ticagrelor 90 mg bid (N=7050)	Ticagrelor 60 mg bid (N=7045)	Placebo (N=7067)	Ticagrelor 90 vs Placebo p-value	Ticagrelor 60 vs Placebo p-value
3-yr KM rate (%)					
Coronary Death, MI, or Stroke	7.0	7.1	8.3	HR 0.82 P=0.002	HR 0.83 P=0.003
Coronary Death or MI	5.6	5.8	6.7	HR 0.81 P=0.004	HR 0.84 P=0.01
Coronary Death	1.5	1.7	2.1	HR 0.73 P=0.02	HR 0.80 P=0.09
Death from any cause	5.2	4.7	5.2	HR 1.00 P=0.99	HR 0.89 P=0.14

Duración da DAPT

Conclusiones

- En general la duración da DAPT después de la ICP con stents farmacológicos debería mantenerse durante 12 m.
- Sin embargo, en pacientes con bajo riesgo isquémico y elevado de sangrado una duración por ≤ 6 m parece apropiada.
- Por otra parte, en pacientes con alto riesgo de trombosis y IAM la duración por > 12 m parece razonable si el riesgo de sangrado es bajo.